MEAN WELL

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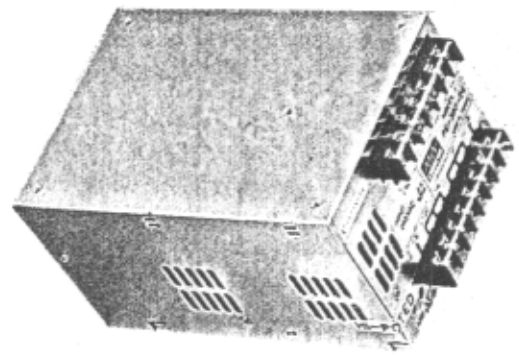
SWITCHING POWER SUPPLY

PS-300 SERIES

- LOW COST, HIGH RELIABILITY
- 105℃ OUTPUT CAPACITOR
- INTERNATIONAL AC INPUT RANGE
- BUILT IN EMI FILTER, LOW RIPPLE NOISE
- HIGH EFFICIENCY, LOW WORKING TEMPERATURE
- SOFT-START CIRCUIT, LIMITING AC SURGE CURRENT
- SHORT CIRCUIT, OVERLOAD, OVERVOLTAGE, OVER TEMP. PROTECTED
- COMPACT SIZE, LIGHT WEIGHT
- 100% FULL LOAD BURN-IN TEST



MODEL / SPECIFICATION	PS-300-12	PS-300-24
DC OUTPUT VOLTAGE	12V	24V
OUTPUT V. TOLERANCE	±1%	±1%
OUTPUT RATED CURRENT	25A	12.5A
OUTPUT CURRENT RANGE	0-25A	0-12.5A
RIPPLE & NOISE (p-p)	150mVp-p	200mVp-p
LINE REGULATION	±0.5%	±0.3%
LOAD REGULATION	±0.5%	±0.3%
DC OUTPUT POWER	300W	300W
EFFICIENCY	78%	83%
DC VOLTAGE ADJ.	±10%	±10%
INPUT VOLTAGE RANGE	95～130VAC / 180～260VAC AUTO SWITCH (OPTION)	
INPUT FREQUENCY	47～63Hz	
AC CURRENT	5A/115V 3A/230V	
INRUSH CURRENT	10A/115V 20A/230V	
OVERLOAD PROTECTION	105%～135% TYPE:CONSTANT CURRENT LIMITING RECOVERY:AUTO	
OVER V. PROTECTION	115%～135%	
OVER TEMP. PROTECTION	≧70℃ OUTPUT SHUTDOWN	
TEMP. COEFFICIENT	±0.05% / ℃	
SETUP,RISE,HOLD UP TIME	200ms, 200ms, 20ms	
WITHSTAND VOLTAGE	I/P-O/P:1.5KV I/P-FG:1.5KV O/P-FG:0.5KV 1min.	
WORKING TEMP.,HUMIDITY	-10℃～+60℃, 20%～90% RH (REFER TO OUTPUT DERATING CURVE)	
STORAGE TEMP.,HUMIDITY	-20℃～+85℃, 10%～95% RH	
DIMENSION	185＊120＊93mm CASE:910	
WEIGHT	1.7Kgs	
SAFETY	-----	
EMC	-----	

NOTE: 1.ALL PARAMETERS ARE SPECIFIED AT 230VAC INPUT, RATED LOAD, 25℃ AMBIENT.
2.TOLERANCE : INCLUDE SET UP TOLERANCE, LINE REGULATION, LOAD REGULATION.
3.RIPPLE & NOISE ARE MEASURED AT 20MHz BY USING A 12" TWISTED PAIR TERMINATED WITH A 0.1uF & 47uF CAPACITOR.
4.LINE REGULATION IS MEASURED FROM LOW LINE TO HIGH LINE AT RATED LOAD.
5.LOAD REGULATION IS MEASURED FROM 0% TO 100% RATED LOAD.

84.10.01

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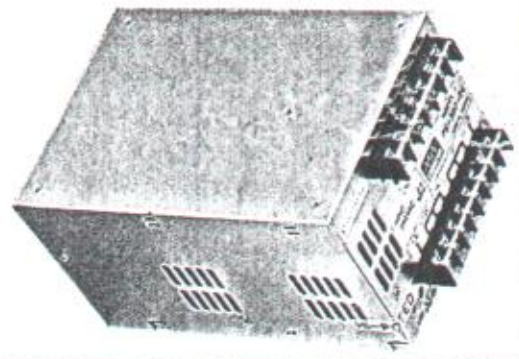

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84.10.01

P/N 147125

PSP-300/PSN-300 FUNCTIONS INSTRUCTION :

1. Input : L N (AC)

PSP-300 is built in a power factor correction circuit. For the use in the world wide input range of 88~264VAC. PSN-300 is only use in 176~264VAC.

2. Voltage Sensor : +S, -S

Voltage sensor is apply to avoide the voltage drop on the connection wiring. Especially when the output connection cable is longer then 1 meter.

- Remove attached short piece and connect with load by using twist pair wire.
- While voltage sensor is connected, voltage drop shall be less than 0.3V (each line 0.15V).

3. Remote Control : R.C, G

Remote control is apply to control power output without operating ON/OFF switch.

- Output normal by short or by a TTL signal low (0~1V), short current shall be less than 10mA.
- Output shutdown by open or by a TTL signal high (2~5V), loading current shall be less than 10mA.

4. Power Fail Signal : P.F.

Power fail & power good signal is a TTL 5V output for applying to control the CPU process.

- Power good signal (+5) is 10~500ms after starting up of output. Output current shall be less than 0.4mA.
- Power fail signal 1ms min. before output dropping. Allowable input current shall be less than 4mA while L.

5. Paralleled Operation : P

Paralleled operation is apply to sereval power paralled connection for incresing the output power.

- Readject each P.S.U. in the same output voltage before connection. the voltage will be according with highest one.
- Parallel operation connect P terminal to each other, rated current of parallel is [Rated current of parallel]=[Rated current of each power source]×paralleled Q'TY×0.9
- Paralleled operation quantity can not exceed 4 pcs.

6. Over Tempeture Protection : O.T.P.

PSP-300/PSN-300 is built in a O.T.P. circuit whenever a high operation temperature inside such as overloading, fan locked. The O.T.P. circuit will work to stop operation for avoiding the damange.

7. Connection :

- Refer to fig.1 (single operate connection), fig.2 (paralleled operate connection).

The control signal shall be used by a twisted pair wire to avoid the noise disturbance such as (P.F., R.C., +S-S).

- Paralleled operation connect FG terminal to each other.

8. Fan on/off Control :

The power supply fan is controlled by an internal temperature sensing switch. When the power supply is lightly loaded and cool, the fan will not run. When demand on the power supply increases and the internal heat sink temperature reaches 55℃ (131℉), the fan will automatically start and remain running until the internal temperature is reduced to about 45℃ (113℉).

FIG. 1 Single Operate Connection

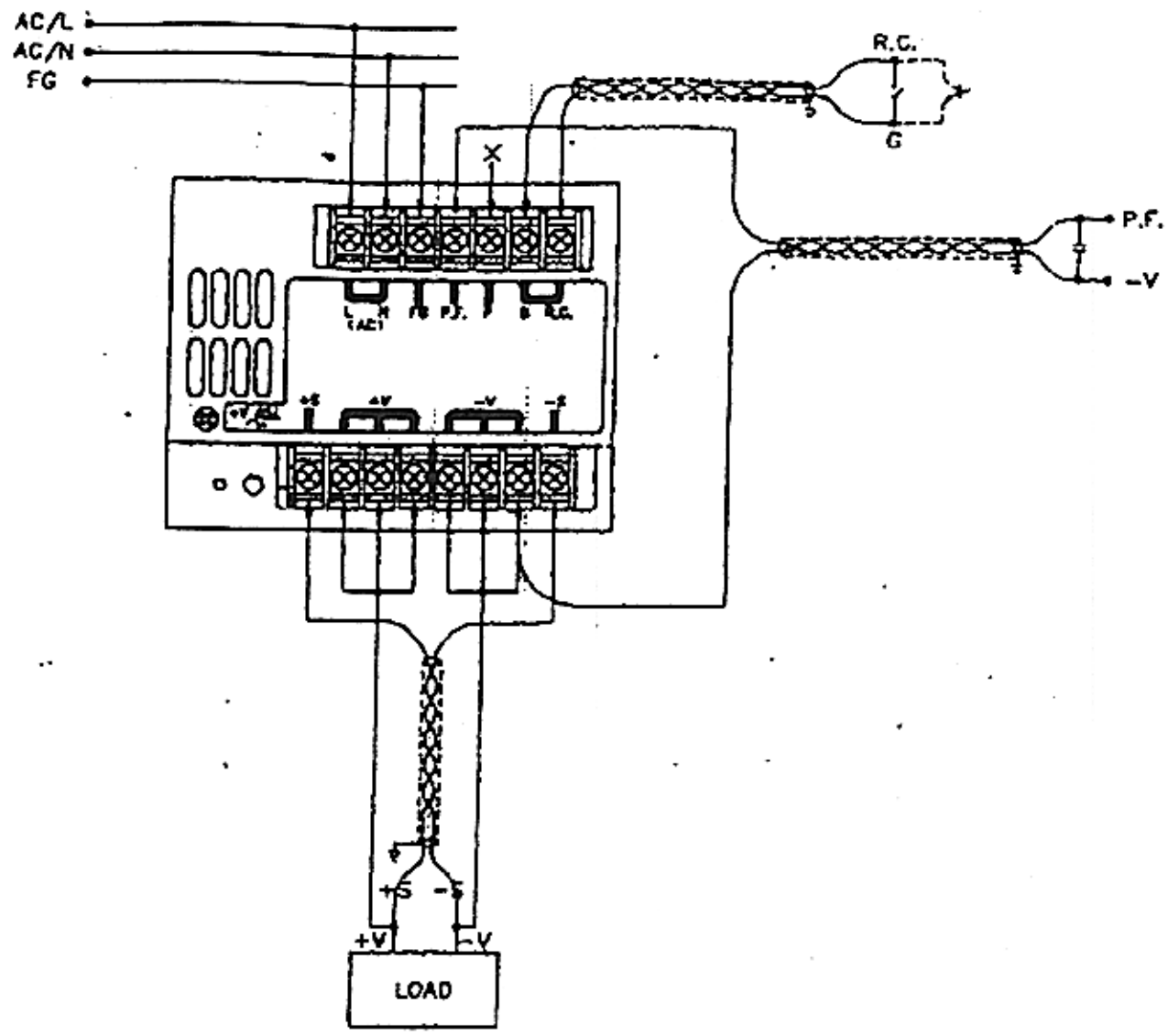
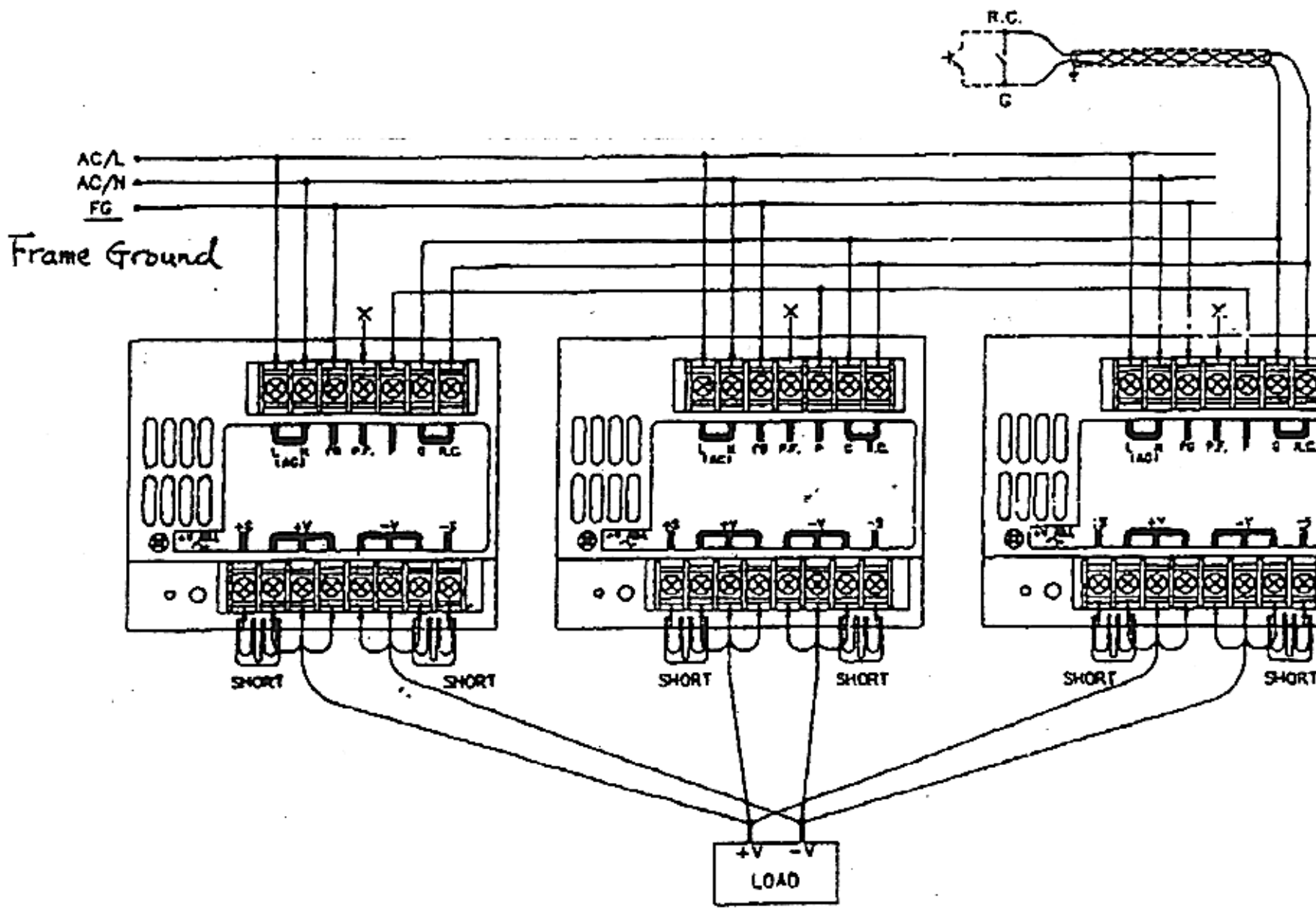


FIG. 2 Paralleled Operate Connection



2.6 Series Use

Power supplies are often connected in series to produce higher voltages. Two types of series connections are described below.

Some Mean Well Power Supplies are designed for series use and have a built in reverse protection diode. Power supplies that have the Function H (as listed in the catalog) are suitable for series use.

a. Fig.14 describes a sample set up for separate distinctive loads.

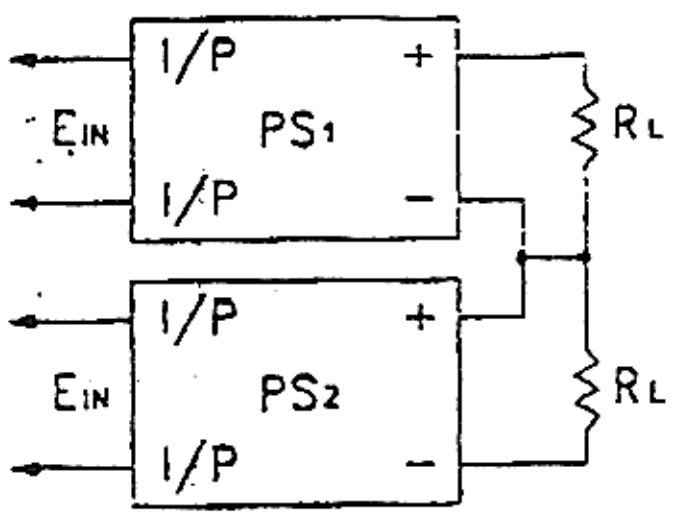


Fig.14

b. Fig.15 illustrates a sample set up for power supplies not designed for series use and or power supplies that do not have a reverse protection diode.

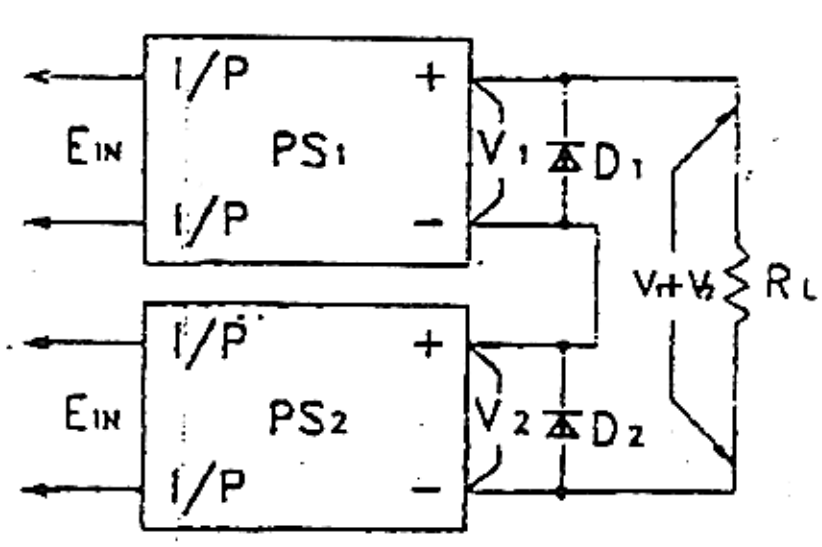


Fig.15